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WHAT IS CLAIMED IS:

- 1. A method for producing a continuous living tissue construct comprising allowing edge contact of at least two separate cell populations maintained in culture, each cell population forming a living tissue, for a period of time sufficient for assembling of said at least two cell populations into a single continuous living tissue construct.
- 2. The method of claim 1, wherein said cell populations are partially or totally confluent.
- 3. The method of claim 1, wherein said cell population are embedded into a gel before being placed in culture for allowing edge contact.
- 4. The method of claim 3, wherein said gel is a collagen gel.
- 5. The method of claim 1, wherein said cell populations are composed of homologous or heterologous cells.
- 6. The method of claim 1, wherein said cell populations are composed of mammalian cells.
- 7. The method of claim 1, wherein said cell populations are composed of cells selected from the group consisting of mesenchymal cells, muscle cells, or fibroblasts.
- 8. The method of claim 7, wherein said muscle cells are smooth muscle cells.

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- 9. The method of claim 1, wherein said cell populations comprise at least one type of cells.
- 10. The method of claim 1, wherein said living tissue is a sheet comprised of at least one cell layer.
- 11. The method of claim 1, wherein at least one of said cell populations is a single cell layer, a tri-dimensional tissue construct or a tissue graft.
- 12. The method of claim 1, wherein at least one of said cell populations comprises genetically transformed cells.
- 13. The method of claim 1, wherein said cell populations are separated by a separator.
- 14. The method of claim 13, wherein said separator is impermeable or allows selective passage of components contained in a culture medium.
- 15. The method of claim 1, wherein said contact is caused by removal of a separator between the at least two cell populations, or by placing said cell populations in contact.
- 16. A method for producing a tubular tissue construct comprising rolling the continuous tissue construct of claim 1.
- 17. The method of claim 16, wherein said tubular tissue construct is a blood vessel.

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- 18. A single continuous tissue construct produced by the method of claim 1.
- 19. The single continuous tissue construct of claim 18, wherein said living tissue sheets are composed of homologous or heterologous types of cells.
- 20. The single continuous tissue construct of claim 19, wherein said types of cells are mammalian cells.
- 21. The single continuous tissue construct of claim 19, wherein said types of cells are selected from the group consisting of mesenchymal cells, muscle cells, or fibroblasts.
- 22. The single continuous tissue construct of claim 21, wherein said muscle cells are smooth muscle cells.
- 23. The single continuous tissue construct of claim 18, wherein at least one living tissue sheet comprises at least one type of cells.
- 24. The single continuous tissue construct of claim 18, wherein said living tissue sheet comprises at least one cell layer.
- 25. The single continuous tissue construct of claim 18, wherein said living tissue sheets are placed in edge contact after removal of a separator to form said continuous tissue construct.

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26. The single continuous tissue construct of claim 25, wherein said separator is impermeable or allows selective passage of components contained in a culture medium in which are maintained said living tissue sheets.

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